

Arts Integrated Lesson Seed



ART FORM:
Dance



SUBJECT AREA:
Mathematics

Lesson Title: The “electric” coordinate grid, 1	Grade: 6
Contributor, School: Jennifer Garton, Berlin Intermediate School	Time Frame: Two 50-minute sessions

State Curriculum Content Standards, Indicators, Objectives

Fine Arts Content Standard(s) Dance 1.0 Perceiving and Responding: Aesthetic Education Students will demonstrate the ability to perceive, perform, and respond to dance. 4.0 Aesthetics and Criticism Students will demonstrate the ability to make aesthetic judgments in dance.	Mathematics Content Standard(s) 1.0 Knowledge of Algebra, Patterns, and Functions Students will algebraically represent, model, analyze, or solve mathematical or real-world problems involving patterns or functional relationships. Topic 1.C: Numeric and Graphic Representations of Relationships 7.0 Process of Mathematics Students demonstrate the processes of mathematics by making connections and applying reasoning to solve problems and to communicate their findings. Topic 7.D: Connections
Fine Arts Content Indicator(s) 1.2 Demonstrate kinesthetic awareness and technical proficiency in dance performance. 4.1 Identify, analyze, and apply criteria to evaluate choreography and performance.	Mathematics Content Indicator(s) 1.C.1 Locate points on a number line and in a coordinate plane. 1.C.2 Analyze linear relationships. Topic 7.D: Connections 7.D.1 Relate or apply mathematics within the discipline, to other disciplines, and to life.
Fine Arts Content Objective(s) 1.2.d Reproduce memorized dances accurately. 4.1.b Select and use criteria to critique personal performances, improvised and choreographed, and the performances of others.	Mathematics Content Objective(s) 1.C.1.b Graph ordered pairs in a coordinate plane. 1.C.2.a. Identify and describe the change represented in a graph. 7.D.1.b Identify mathematical concepts in relationship to other disciplines.
Objective(s) (Connecting the content areas) Students will track and verbally explain the mathematical coordinates of the dance “The Electric Slide” on a room-size, four quadrant grid.	

Description of Lesson/Activities

Day 1

- Students will learn the line dance “The Electric Slide” and will review the four quadrants of the coordinate plane, how to locate points on the plane, and how to correctly identify the ordered pair that names the point.

Day 2

- Review the dance and move to a life-size grid. Each student will begin on the x-axis and practice adjusting the movements in the dance to the whole numbered intervals on the grid. Once a degree of mastery is achieved, students will be divided into pairs, and each student will read the grid as stops are made at regular intervals. When the student is successful at one juncture, she/he relocates to a new position on the grid, thus having to reorient and read a new ordered pair.

Assessment Strategies

Formative: Each student's ability to move to the correct place on the grid during the song will determine if she/he has mastered the dance steps. Through self-monitoring and teacher direction, immediate adjustments will be made during the class activity.

Summative: The mathematics objective will be assessed by stopping the music and asking the students to share the specific coordinates.